Summer session offers nuclear energy researchers a week at National Scientific User Facility

University and industry researchers will have the opportunity to explore the technical challenges of working with nuclear materials, fuels and modeling during the June 16-20, 2008, Advanced Test Reactor National Scientific User Facility (ATR NSUF) summer session sponsored by Idaho National Laboratory, Idaho Falls, Idaho.

"In this inaugural ATR NSUF summer session, it is our hope that it will draw broad participation from U.S. universities and industry," U.S. Department of Energy Assistant Secretary for Nuclear Energy Dennis Spurgeon said. "This is a unique opportunity not only to study the state of the art in nuclear fuel and materials testing with some of the nation's leading experts, but it provides potential future users of the Advanced Test Reactor with greater understanding of how this federal resource, which has served the nation's Naval Nuclear Propulsion Program well for many years, can be used to advance civilian nuclear technology development."

The unique serpentine design of the ATR reactor core provides nine experimental locations. Each location has its own test conditions, and experiments can be run simultaneously.

Applications for the 2008 ATR NSUF summer session are available on the ATR NSUF Web site Applications are due Feb. 28, 2008.

The summer session is open to industry researchers, college and university faculty and students working or studying nuclear energy, including nuclear engineering, materials science, physics and related engineering and science fields. Students should be enrolled at the upper level undergraduate or at the graduate level.

There is no registration fee for summer session. Scholarships will be provided to U.S. university participants on a competitive basis, and these will cover expenses for travel between their home and Idaho Falls, hotel and meals. Nonscholarship participants must cover their own expenses.

The summer session curriculum will cover:

- Basics of irradiation damage and corrosion in reactor materials.
- Light-water reactor fuels and materials.
- Fast reactor fuels and materials.
- Fuel and material modeling.
- Gas reactor fuels.
- Capabilities of the ATR National Scientific User Facility for irradiation testing and post-irradiation examination.

According to interim Scientific Director Dr. Mitch Meyer at INL, "The session this summer is important to grooming a new generation of nuclear researchers. It was conceived to introduce the brightest students in the nation to the knowledge held by some of the top research scientists."

The curriculum will include lectures and presentations by some of the nation's foremost experts in nuclear research and development. The program also includes tours of the Advanced Test Reactor and post-irradiation examination facilities at the Materials and Fuels Complex at Idaho National Laboratory. Participants will also interact with INL scientists and engineers, both during tours and in classroom sessions

The ATR NSUF was established by the U.S. Department of Energy in April 2007 to assert the country's leadership in nuclear technology research and development, and to make the testing and examination capabilities and facilities at INL more accessible to researchers with academia, industry and other laboratories.

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Feature Archive